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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,440	04/26/2001	Ulrich A. Muller	10366-012	7500
20583	7590	10/20/2005	EXAMINER	
JONES DAY 222 EAST 41ST ST NEW YORK, NY 10017			MILEF, ELDA G	
			ART UNIT	PAPER NUMBER
			3628	
DATE MAILED: 10/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/842,440	Applicant(s) MULLER, ULRICH A.	
	Examiner Elda Milef	Art Unit 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. See pp. 70-71 of the specification.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

"Information 38" cited in the Specification is not shown in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

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immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. "Domain error" is not described or defined in the specification.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothman (Rothman, Philip. *Nonlinear Time Series Analysis of Economic and Financial Data*. Kluwer Academic Publishers, 1999. in view of Asherman (Asherman et al., US Patent No. 6,384,748 in further view of Bilson (Bilson, Gretchen. *Adapting Formal Testing Technique for Windows*

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Applications. Microsoft Systems Journal, v 7, n1, p 77(20) Jan-Feb 1992. pp. 1-10).

Re claim 1: It is well known in the art that time series data is filtered as stated in the applicant's own background of the invention.-see pgs. 1-2.

Rothman discloses testing for credibility of said data that passes the tests for decimal error, scaling error and domain error by comparing nearby data in the time series. See "Outliers" pp. 103-104.

Although Rothman does disclose the testing of data -see pp. 289-314, Rothman does not expressly disclose testing said data for decimal, scaling, and domain errors. Asherman, however, discloses testing for decimal point errors and scaling error in cols. 5-6, in particular, see col. 6, lines 10-25 ("First the decimal points are aligned by increasing exponent of the lesser number, in absolute value, and logically shifting its mantissa to the right by the corresponding number of digits. It is preferable to maintain a byte offset to avoid an actual shifting of the data. If the difference between the exponents is odd, an additional single-digit shift is performed...trailing zeros, if any, are removed and rounding performed if the scale of the result exceeds the scale of the number being operated

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upon"). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Rothman to include testing for decimal and scaling errors as was done by Asherman in order to minimize errors resulting from performing mathematical operations on variables having dissimilar data types.

The examiner is interpreting "domain error" as an error in defining a variable. This error is commonly found in computer programming as evidenced by Bilson ("Domain testing looks for bugs in the definition of domains.")-see pp. 1-10, in particular, p. 4, para. 8. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Rothman to include testing for domain errors as was done by Bilson in order to minimize errors resulting from performing mathematical operations on variables having dissimilar data types.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Korisch (US Patent No. 6,415,268)-cited for a method of recovering real value of a stock from the stock pricing data.

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Kosaka et al. (US Patent No. 5,109,475)-cited for its reference to a method and a system for selection of time series data.

Ratnaraj et al. (US Patent No. 6,185,567)-cited for authenticated access to Internet based research and data services and extracting time series data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elda Milef whose telephone number is (571)272-8124. The examiner can normally be reached on Monday - Friday 9:15 am to 5:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600